

### ABSTRACT OF THE DISCLOSURE

A hydrogen gas detector for detection of hydrogen gas in a gaseous environment. The detector comprises a light/heat source, an optical detector, and an optical barrier between the source and detector. The optical barrier responds to the presence of hydrogen by responsively changing from a first optical state to a different second optical state, whereby transmission of light from the light/heat source through the optical barrier is altered by the presence of hydrogen and the altered transmission is sensed by the optical detector to provide an indication of the presence of hydrogen gas in the gaseous environment.

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